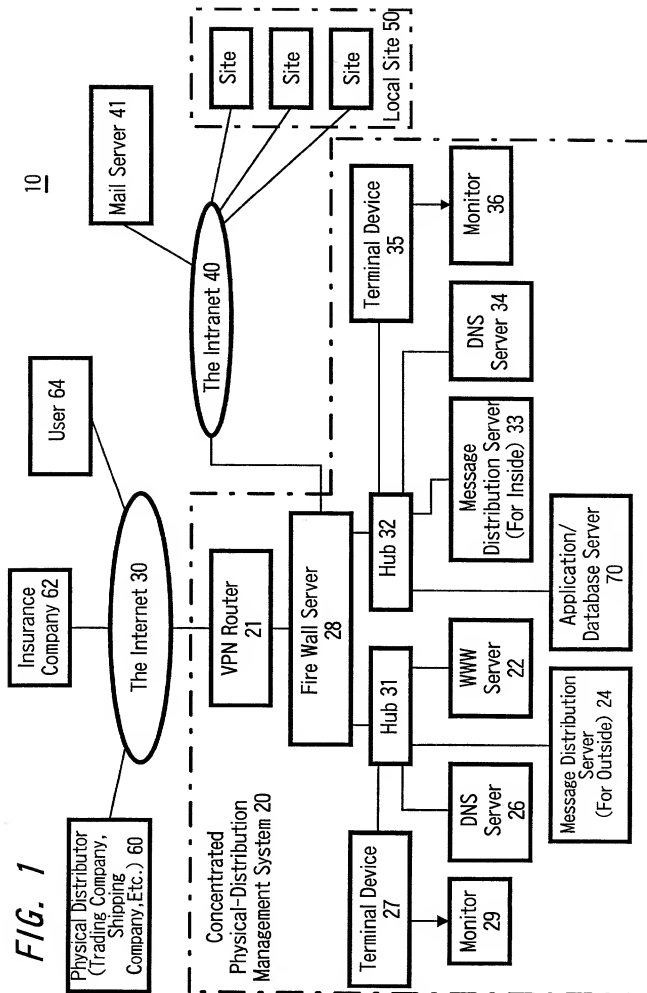


FIG. 1



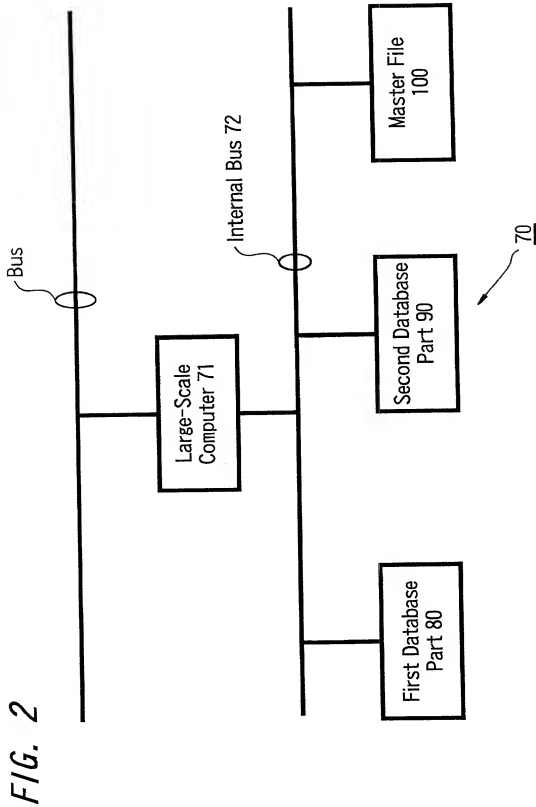


FIG. 3
FIG. 3A

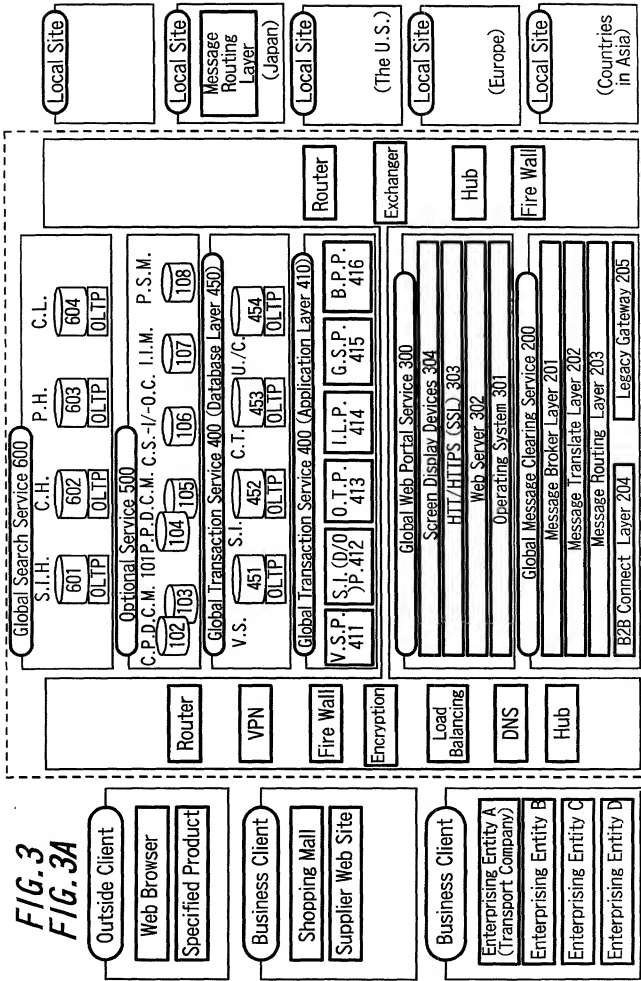


FIG. 3B

601: S.I.H.= Shipment Instruction History

602: C.H. : Claim History

603: P.H. : Payment History

604: C.L.: Cargo Location

C.P.D.C.M. : Claimed Physical-Distribution Cost Master 101

P.P.D.C.M. : Paid Physical-Distribution Cost Master

C.S.-I./-O.C. : Cargo Stock-in/-Out Cost

I.I.M. : Indemnity Insurance Master

P.S.M. : Price Settlement Master

V.S. : Vessel Schedule 451

S.I. : Shipment Instruction 452

C.T. : Cargo Trucking 453

U./C. : User/Carrier 454

V.S.P. : Vessel Schedule Portal 411

S.I.(D/O) : Shipment Instruction (D/O) Portal 412

O.T.P. : Order Trucking Portal 413

I.L.P. : Inventory Location Portal 414

G.S.P. : Global Search Portal 415

B.P.P. : Bill Payment Portal 416

FIG. 4

<p>Message Broker 201</p> <table border="1"> <tr> <td>RDBMS Connector (Batch Processing)</td> <td>ERP Connector (Batch Processing)</td> </tr> <tr> <td>RDBMS Connector (Real-Time Processing)</td> <td>ERP Connector (Real-Time Processing)</td> </tr> <tr> <td>ODBC</td> <td>JDBC</td> </tr> <tr> <td></td> <td>API</td> </tr> </table>		RDBMS Connector (Batch Processing)	ERP Connector (Batch Processing)	RDBMS Connector (Real-Time Processing)	ERP Connector (Real-Time Processing)	ODBC	JDBC		API
RDBMS Connector (Batch Processing)	ERP Connector (Batch Processing)								
RDBMS Connector (Real-Time Processing)	ERP Connector (Real-Time Processing)								
ODBC	JDBC								
	API								
<p>Message Translator 202</p> <table border="1"> <tr> <td>EDIFACT</td> <td>XML</td> </tr> <tr> <td>ANSI X.12</td> <td>IDOC</td> </tr> <tr> <td>Flat File</td> <td></td> </tr> </table>		EDIFACT	XML	ANSI X.12	IDOC	Flat File			
EDIFACT	XML								
ANSI X.12	IDOC								
Flat File									
<p>Message Router 203</p> <table border="1"> <tr> <td>Mail Box</td> <td>Message Director</td> </tr> <tr> <td>Message Separator</td> <td>Message Active Routing</td> </tr> </table>		Mail Box	Message Director	Message Separator	Message Active Routing				
Mail Box	Message Director								
Message Separator	Message Active Routing								
<p>B2B Connect Layer 204</p> <table border="1"> <tr> <td>FTP</td> <td>Legacy Gateway 205</td> </tr> <tr> <td>HTTP</td> <td>Gateway Program(FTP)</td> </tr> <tr> <td>WebEDI</td> <td>Gateway Program(Connect:Direct)</td> </tr> <tr> <td>CONNECT:Direct</td> <td></td> </tr> </table>		FTP	Legacy Gateway 205	HTTP	Gateway Program(FTP)	WebEDI	Gateway Program(Connect:Direct)	CONNECT:Direct	
FTP	Legacy Gateway 205								
HTTP	Gateway Program(FTP)								
WebEDI	Gateway Program(Connect:Direct)								
CONNECT:Direct									

FIG. 5
FIG. 5A

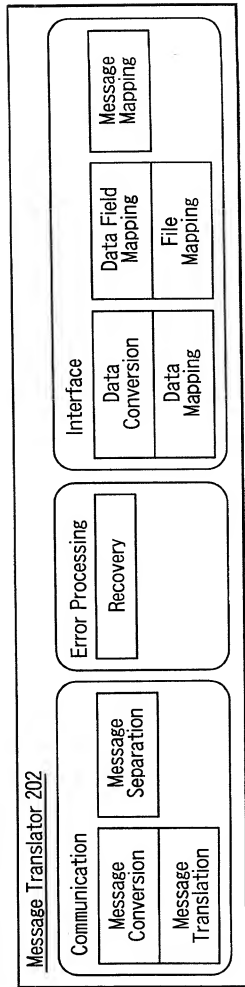
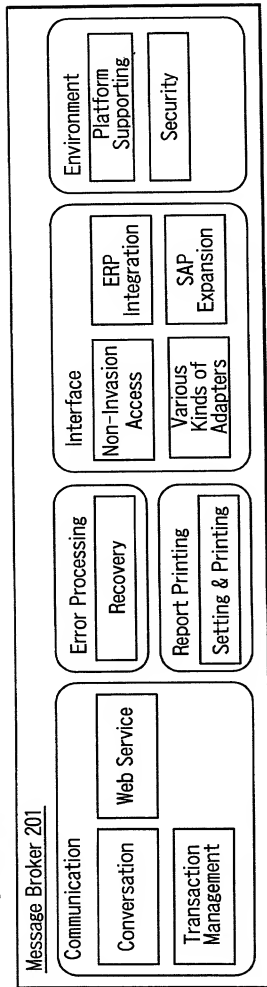


FIG. 5B

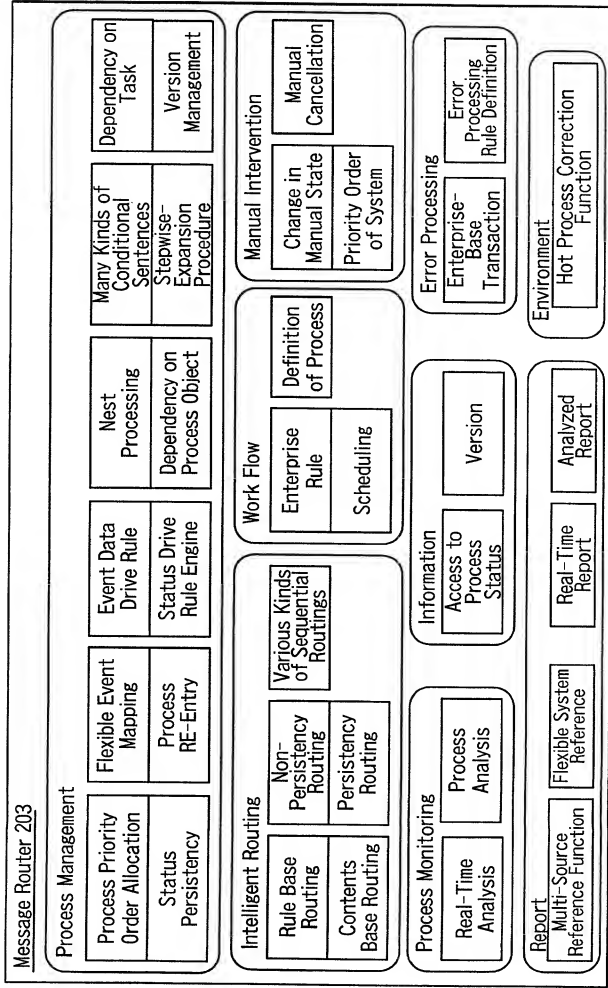


FIG. 7

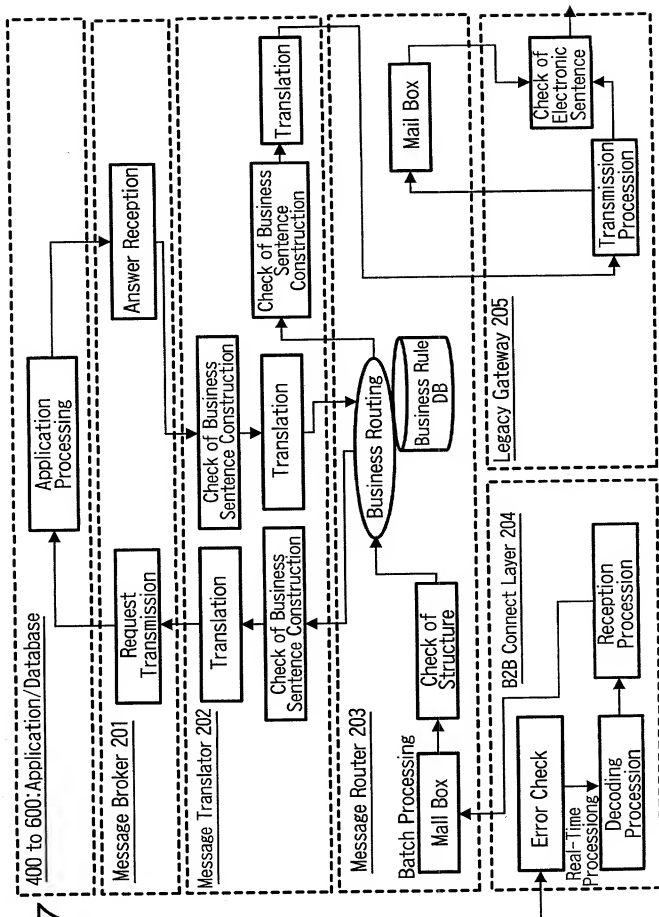


FIG. 8
FIG. 8A

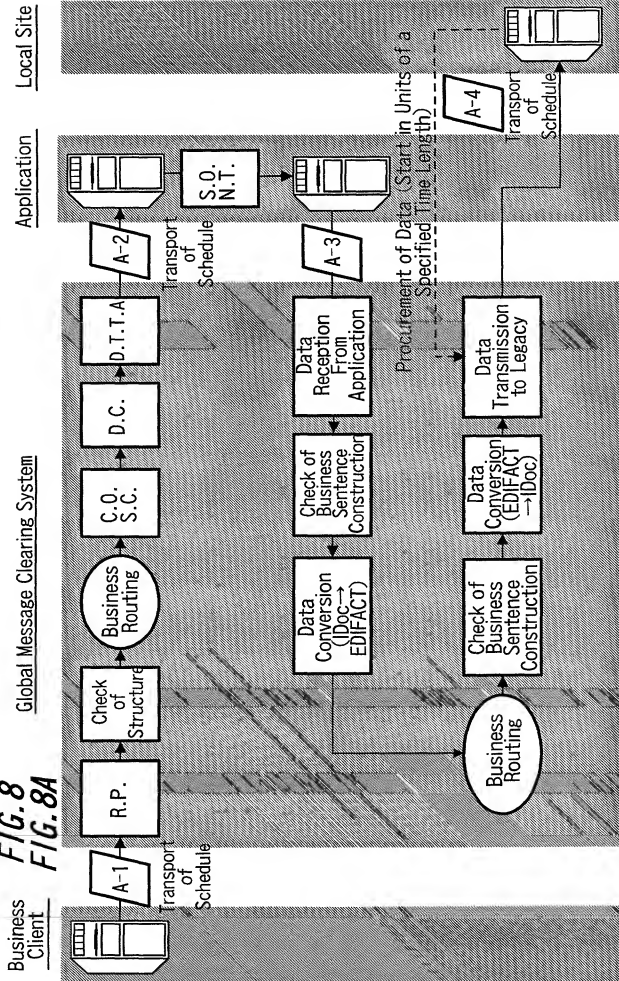


FIG. 9 FIG. 9A

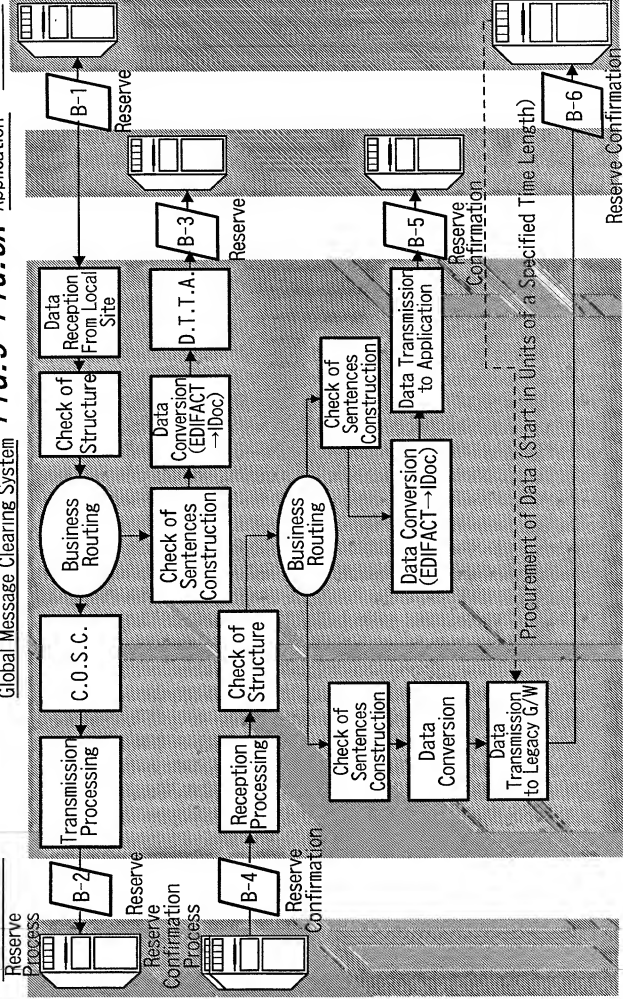


FIG. 10 *FIG. 10A* Global Message Clearing System

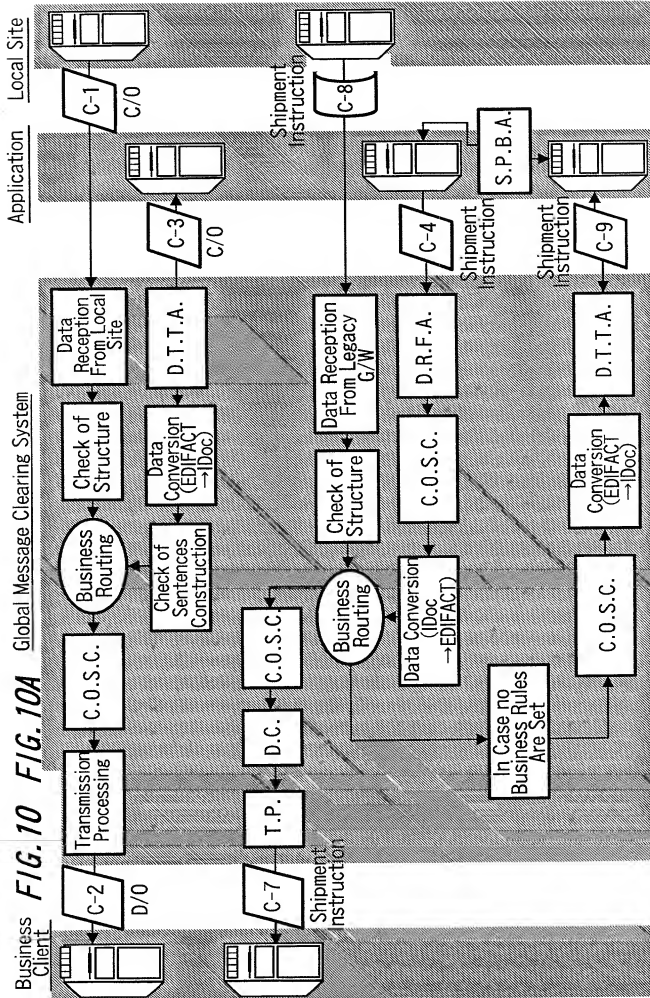


FIG. 11 *FIG. 11A* Global Message Clearing System

Application Local Site

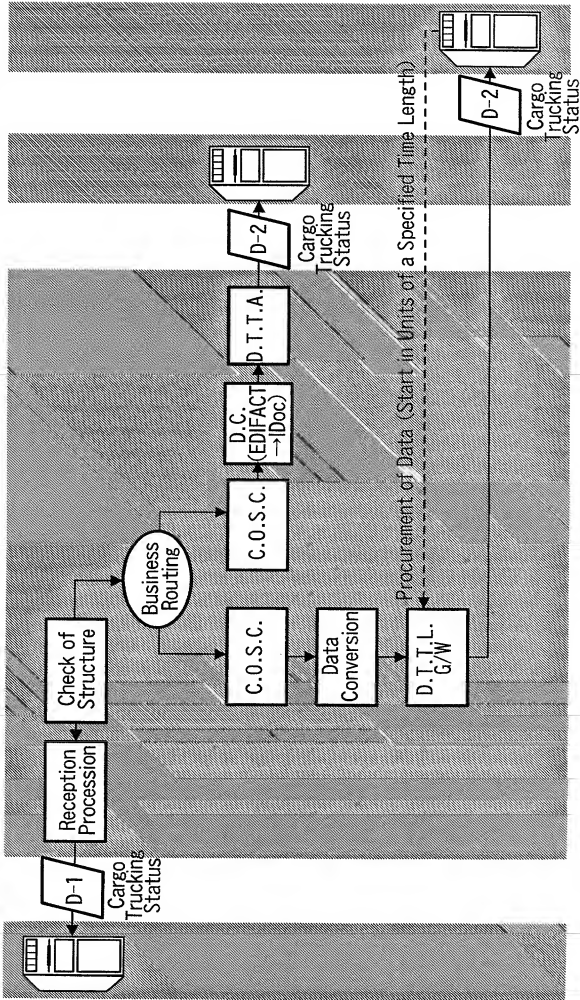


FIG. 12
FIG. 12A

Business
Client

Global Message Clearing System

Application

Local Site

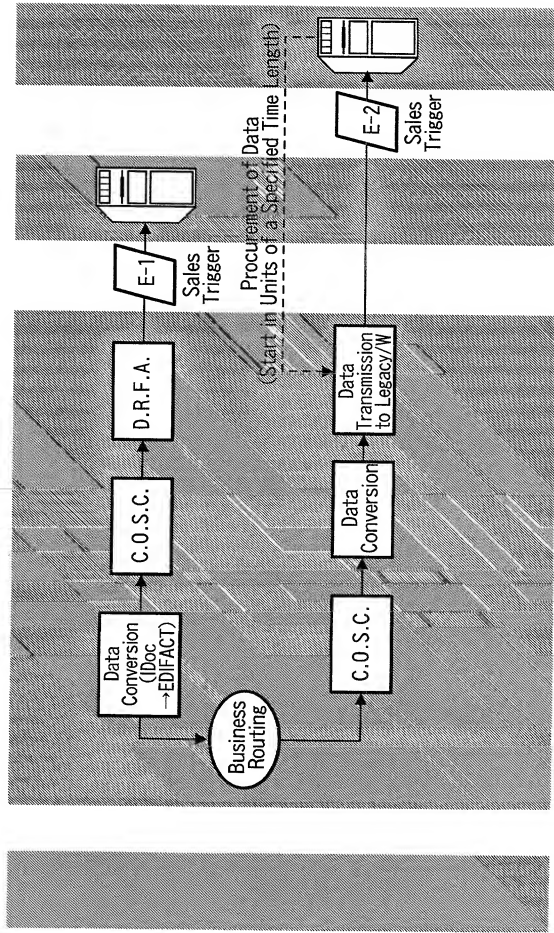


FIG. 13A

Business Client

Global Message Clearing System

Application

Local Site

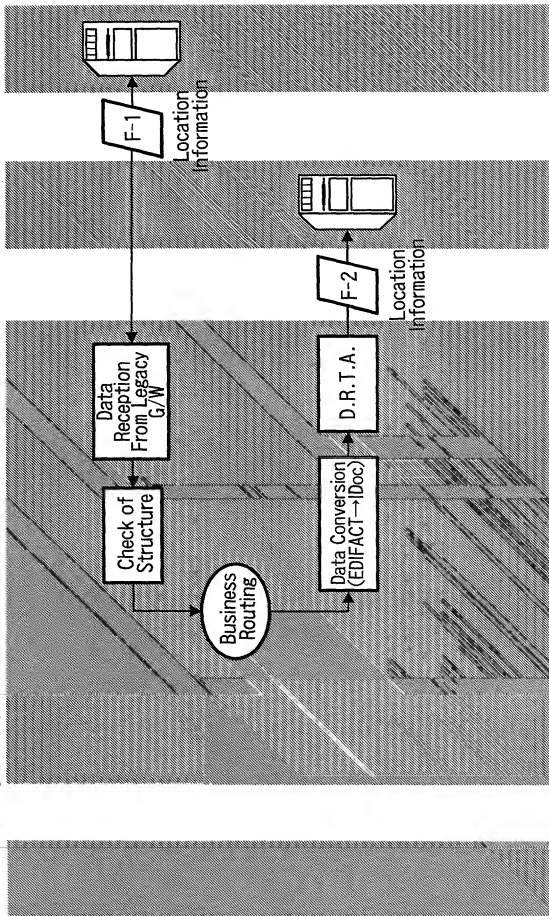


FIG. 14

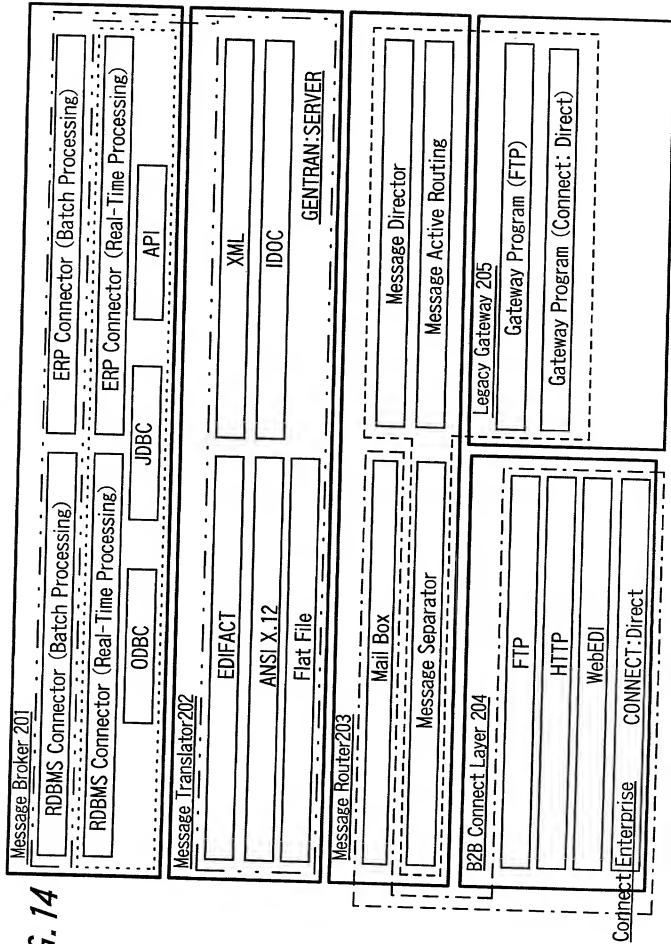


FIG. 8B

R.P. : Reception Processing

C.O.S.C. : Check of Sentence Construction

D.C. : Data Conversion

D.T.T.A. : Data Transmission to Application

S.O.N.T. : Setup of Nomination Table

FIG. 9B

C.O.S.C. : Check of Sentence Construction

D.T.T.A. : Data Transmission to Application

FIG. 10B

C.O.S.C. : Check of Sentence Construction

D.T.T.A. : Data Transmission to Application

T.P. : Transmission Procession

D.C. : Data Conversion

C.O.S.C. : Check of Sentence Construction

C.O.S.C. : Check of Sentence Construction

D.R.F.A. : Data Reception From Application

C.O.S.C. : Check of Sentence Construction

D.T.T.A. : Data Transmission to Application

S.P.B.A. : Shipment Processing by Application

FIG. 11B

C.O.S.C. : Check of Sentence Construction

D.T.T.A. : Data Transmission to Application

C.O.S.C. : Check of Sentence Construction

D.T.T.A. : Data Transmission to Application

D.T.T.L.G/W : Data Transmission to Legacy G/W

FIG. 12B

C.O.S.C. : Check of Sentence Construction

C.O.S.C. : Check of Sentence Construction

FIG. 13B

D.R.T.A. : Data Reception to Application